REMARKS

Claims 1-28 were originally filed in this application. The Examiner has restricted prosecution to one of two claim sets. Group I, claims 1-15, are drawn to a coated article. Group II, claims 16-28 are drawn to a method of providing a wear resistant coating to a substrate. During a telephone conversation with the Examiner, a provisional election was made by James Singer with traverse to prosecute the claims in Group I. Applicants' cancellation of the claims is without prejudice, and Applicants expressly reserve the right to prosecute claims again in this or a further application.

Applicants hereby affirm that election. Applicants have amended claim 8 and cancelled claims 10 and 16-28. Accordingly, claims 1-9 and 11-15 are pending.

The amendments above and the following remarks are believed to be fully responsive to the Office Action and are believed to render the claims at issue patentable. Applicants request allowance of the pending claims.

I. Yao et al

Claims 1-3, 5, 7-11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,639,285 to Yao et al.

The Examiner suggests that Yao et al. discloses a cutting tool with a tungsten carbide substrate and a layer on the substrate (abstract). The layer on the substrate may be cubic boron nitride (CBN) particle coated with titanium carbonitride or titanium aluminum carbonitride (column 9 lines 5-10 and column 3 lines 60-67). Yao teaches coating the CBN particles with the "**refractory** material" titanium carbonitride or titanium aluminum carbonitride

(column 3 lines 62-63). (emphasis added) Yao et al. does not teach "super abrasive particles having a protective **metal** coating," as is claimed in Applicants' claim 1. (emphasis added) Yao et al. does teach coating titanium carbonitride, titanium carbide, titanium nitride or titanium aluminum carbonitride with a thin layer of cobalt and/or aluminum or cobalt aluminide before mixing with CBN crystals. (column 8 lines 66-67 and column 9 lines 1-2) However, titanium carbonitride, titanium carbide, titanium nitride or titanium aluminum carbonitride are not superabrasive particles. Yao et al. does not teach anywhere of "superabrasive particles having a protective metallic coating," as claimed by Applicants in Applicants' claim 1. In paragraph [0018] of Applicants' patent application, "superabrasive" refers to diamond (both natural and synthetic) materials, cubic boron nitride (cBN), and mixtures thereof. As such, Applicants respectfully suggest that Yao et al. does not anticipate Applicants' claim 1, and that Applicants' claim 1 is in condition for allowance. Further, since Applicants' independent claim 1 is in condition for allowance, claims 2-3, 5, 7-9, 11, and 13-15 are also in condition for allowance.

II. McEachron et al.

The Examiner has rejected claims 1-5, 8-9, and 13-14 under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,232,469 to McEachron et al. McEachron et al. teach a "mixture of the coated abrasives and metal particles can be pressed at ambient temperatures to the shape desired and the pressed article heated so as to sinter the metal therein. (column 4 lines 26-29) McEachron does not teach that "a coated article comprising a substrate and a wear-resistant coating...wherein the coated superabrasive particles are co-deposited within the matrix material" as claimed by Applicants in claim 1. McEachron et al. teach the formation of shaped

parts, not coatings on a substrate. In fact, McEachron et al. do not even mention coatings. McEachron et al., for example, teach the production of arc segments for 7" diameter saw blades. The smallest dimension of the arc segments prepared by McEachron et al. is 0.140 inches. (column 6 lines 65-70 and column 7, line 1) This demonstrates that McEachron et al. is teaching the production of parts, not coatings, and, not a "coated article comprising a substrate and a wear-resistant coating," as in Applicants' claim 1. This is further demonstrated in Applicants' dependent claim 12, ,which claims that "the wear-resistant coating has a thickness of up to about 1000 μm." This converts to approximately 0.04 inches. Applicants' wear resistant coating is at least an order of magnitude less than the thickness of parts prepared according to embodiments of McEachron.

While respectfully and strongly disagreeing that McEachron anticipates Applicants' claim 1 of "[a] coated article comprising a substrate and wear-resistant coating," Applicants have amended claim 8 to remove the term "brazing" from the coating techniques of Applicants' embodiments. McEachron et al. does not teach that "the coated superabrasives particles are co-deposited within the matrix material, as in Applicants' claim 1. Examples in McEachron et al. teach that their parts, for example, saw blade arc segments, are induction-brazed onto a circular steel core. (column 6 line 68 – column 7 line 2) This is not co-depositing as taught and claimed by Applicants. McEachron et al. uses induction brazing to attach cutting blade arc segments to the circular steel core. Despite Applicants' argument that McEachron et al. teaches brazing superabrasive-containing **parts** to steel, and not "[a] coated article comprising a substrate and wear-resistant coating," Applicants have amended claim 8 to remove reference to "brazing."

Based on the preceding arguments and amendment, Applicants request that independent claim 1 is in condition for allowance. Further, Applicants request that claims 5, 8-9, and 13-14, which depend from claim 1, are also in condition for allowance.

III. Yao et al. in view of Ika

The Examiner has rejected claim 6 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,639,285 to Yao et al. or alternatively to U.S. Pat. No. 5,232,469 to McEachron et al. as applied to claim 1 in view of U.S. Pat. No. 5,167,674 to Ika. Ika discloses a grinding wheel started with a conventional phenolic based perform coated with a liquid phenolic cement to adhere the superabrasive. (column 6 lines 64-68) Applicants respectfully insist that since claim 1 is in condition for allowance over Yao et al. by arguments presented herein in section I above, and since claim 6 depends from claim 1, claim 6 is in condition for allowance.

IV. Yao et al. (§ 103)

The Examiner has rejected claim 12 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,639,285 to Yao et al. as applied to claim 1 above. The Examiner suggests that Yao discloses all of the limitations of claim 1. As presented, *supra*, Yao et al. does not disclose or claim "superabrasive particles having a protective metallic coating," as in Applicants' claim 1. As such, claims that depend from claim 1, and are in condition for allowance. Applicants thereby request that claim 12 is in condition for allowance.

Based on all of the arguments and amendments presented, *supra*, Applicants assert that independent claim 1 is in condition for allowance. As such, claims 2-9 and 11-15,

which depend from claim 1 are also in condition for allowance. Applicants request that the Examiner allow claims 1-9 and 11-15.

CONCLUSION

Claims 16-28 are cancelled in response to the restriction requirement, without prejudice to further present the cancelled claims in a future application.

Claim 10 has been cancelled.

Claim 8 has been amended.

Claims 1-9 and 11-15 are now pending.

All of the stated grounds of rejection have been properly traversed, accommodated or rendered moot. Applicants, therefore, respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. There being no other rejections, Applicants respectfully request that the current application be allowed and passed to issue.

Should the Examiner have any questions or comments, or need any additional information, she is invited to contact the undersigned at her convenience.

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